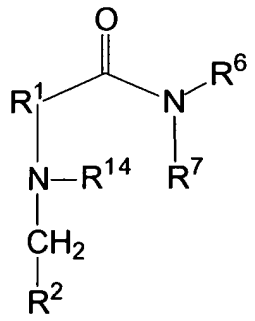
We claim:

1. A compound according to structural formula (I):

(I) 

including the pharmaceutically acceptable salts thereof, wherein:

N-R^1-C(O) is a polyene macrolide backbone;

CH_2-R^2 is a carbohydrate residue, where the illustrated CH_2 is derived from the anomeric carbon of a terminal carbohydrate saccharide and R^2 represents the remainder of the carbohydrate;

either: (i) R^6 is selected from the group consisting of hydrogen, non-polar substituent and water-solubility increasing substituent and R^7 is a water-solubility increasing substituent; or (ii) R^6 and R^7, taken together with the amide nitrogen to which they are bonded, form a saturated or unsaturated ring which optionally includes one or more of the same or different ring heteroatoms and which is optionally substituted at one or more ring carbon or heteroatoms with the same or different polar or non-polar substituents or combinations thereof; and

R^{14} is hydrogen or alkyl.

2. The compound of Claim 1 in which polyene macrolide backbone N-R^1-C(O) is derived from amphotericin B or nystatin.

3. The compound of Claim 1 in which R^{14} is hydrogen.

4. The compound of Claim 1 in which:

either: (i) R^6 is selected from the group consisting of hydrogen, (C_1-C_6) alkyl, (C_1-C_6) alkyl substituted with one or more of the same or different R^{10} groups, -[$(CH_2)_n$-NH]$_p$-$(CH_2)_n$-$NR^{15}R^{16}$, -NH-[$(CH_2)_n$-NH]$_p$-$(CH_2)_p$-$NR^{15}R^{16}$, -[$(CH_2)_n$-NH]$_p$-$(CH_2)_n$-R^{17} and -NH-[$(CH_2)_n$-NH]$_p$-$(CH_2)_p$-R^{17} and R^7 is selected from the group consisting of (C_1-C_6) alkyl substituted with one or more of the same or different R^{10} groups, -[$(CH_2)_n$-NH]$_p$-$(CH_2)_n$-$NR^{15}R^{16}$, -NH-[$(CH_2)_n$-NH]$_p$-$(CH_2)_p$-$NR^{15}R^{16}$, -[$(CH_2)_n$-NH]$_p$-$(CH_2)_n$-R^{17} and -NH-[$(CH_2)_n$-NH]$_p$-$(CH_2)_p$-R^{17}; or (ii) R^6 and R^7, taken together with the amide nitrogen atom to which they are bonded, form a 5- or 6-membered saturated or unsaturated ring which optionally includes one or more of the same or different additional heteroatoms selected from the group consisting of O, N, NH and S and which is optionally substituted at one or more ring carbon or heteroatoms with the same or different substituents selected from the group consisting of R^{10}, (C_1-C_6) alkyl, (C_1-C_6) alkoxy, -$(CH_2)_n$-R^{10}, (C_5-C_6) aryl, phenyl, 6- to 9-membered arylalkyl and benzyl;

each R^{10} is independently selected from the group consisting of -OH, =O (oxo), -NH_2 (amino), =NH (imino), -C(=NH)-NH_2 (amidino) and -NH-C(=NH)-NH_2 (guanidino);

either: (i) R^{15} and R^{16} are each independently selected from the group consisting of hydrogen, (C_1-C_6) alkyl and (C_1-C_6) alkyl independently substituted with one or more of the same or different R^{10} groups; or (ii) R^{15} and R^{16}, taken together with the nitrogen atom to which they are bonded, form a 5- or 6-membered saturated or unsaturated ring which optionally includes one or more of the same or different additional heteroatoms selected from the group consisting of O, N, NH and S and which is optionally substituted at one or more ring carbon or heteroatoms with the same or different substituents selected from the group consisting of R^{10}, (C_1-C_6) alkyl, (C_1-C_6) alkoxy, -$(CH_2)_n$-R^{10}, (C_5-C_6) aryl, phenyl, 6- to 9-membered arylalkyl and benzyl;

R^{17} is a 5- or 6-membered saturated or unsaturated ring including one or more of the same or different heteroatoms selected from the group consisting of O, N, NH and S and which is optionally substituted at one or more ring carbon or heteroatoms

with the same or different substituents selected from the group consisting of R^{10}, (C_1-C_6) alkyl, (C_1-C_6) alkoxy, -(CH_2)$_n$-R^{10}, (C_5-C_6) aryl, phenyl, 6- to 9-membered arylalkyl and benzyl;

each n is independently an integer from 1 to 6; and

each p is independently an integer from 0 to 6.

5. The compound of Claim 4 in which R^6 and R^7 are defined according to alternative (i).

6. The compound of Claim 4 in which R^6 and R^7 are defined according to alternative (ii).

7. The compound of Claim 1 or 4 which has one or more features selected from the group consisting of:

N-R^1-C(O) is a polyene backbone derived from AmB or nystatin;

CH_2-R^2 is a mono-, di- or oligosaccharide;

R^6 is hydrogen; and

R^{14} is hydrogen.

8. The compound of Claim 4 in which:

R^6 is hydrogen;

R^7 is selected from the group consisting Of -NH-NR $^{15}R^{16}$, -(CH_2)$_n$-$NR^{15}R^{16}$, -(CH_2)$_n$-R^{17} and (C_1-C_6) alkyl substituted with one or more amino or hydroxyl groups;

R^{15} and R^{16}, taken together with the nitrogen atom to which they are bonded, form a 5- or 6-membered saturated or unsaturated ring which optionally includes one or more additional heteroatoms selected from the group consisting of O, S, N and NH and/or which is optionally substituted at one or more ring carbon or

heteroatoms with the same or different R^{10}, (C_1-C_6) alkyl, (C_1-C_6) alkoxy, (C_5-C_6) aryl, phenyl, 6- to 9-membered arylalkyl or benzyl groups;

R^{17} is a 5- or 6-membered heteroaryl which is optionally substituted with one or more of the same or different (C_1-C_6) alkyl, (C_1-C_6) alkoxy, (C_5-C_6) aryl, phenyl, 6- to 9-membered arylalkyl or benzyl groups.

9. The compound of Claim 4 in which:

R^6 and R^7, taken together with the nitrogen atom to which they are bonded, form a 5- to 6-membered cycloheteroalkyl ring which is optionally substituted with one or more substituent selected from the group consisting of (C_1-C_6) alkyl, (C_1-C_6) alkoxy, -$(CH_2)_n$-R^{10}, (C_5-$_6$) aryl, phenyl, 6- to 9-membered arylalkyl and benzyl; and

R^{10} is amino or hydroxy.

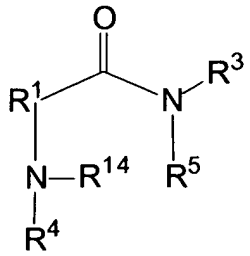
10. The compound of Claim 1 in which -CH_2-R^2 is a mono-, di- or oligosaccharide.

11. The compound of Claim 10 in which -CH_2-R^2 is an Amadori rearrangement product of a reducing carbohydrate selected from the group consisting of glucose, galactose, maltose, cellobiose and lactose.

12. The compound of Claim 1 or 11 in which substituent NR^6R^7 is contributed by any of the amines listed in TABLE 2.

13. The compound of Claim 1 which is selected from the group consisting of Compounds **100**, **101**, **102**, **103**, **104**, **105**, **106**, **107**, **108**, **109**, **110**, **111**, **112**, **113**, **114**, **115**, **116**, **117**, **118**, **119**, **120**, **121**, **122**, **127**, **128**, **129**, **130**, **131**, **132**, **133**, **134**, **135**, **136**, **137**, **138**, **139**, **140**, **141**, **142**, **143**, **144**, **145**, **146** and **147**.

14. A compound according to structural formula (II):

(II) 

including the pharmaceutically acceptable salts thereof, wherein:

N-R^1-C(O) and R^{14} are as previously defined in Claim 1;

R^3 is hydrogen, a non-polar substituent or a water-solubility increasing substituent;

R^4 is hydrogen or alkyl; and

R^5 is a water-solubility increasing substituent selected from the group consisting of polyhydroxylated alkyl, monosaccharide, disaccharide and oligosaccharide.

15. The compound of Claim 14 in which polyene macrolide backbone N-R^1-C(O) is derived from amphotericin B or nystatin.

16. The compound of Claim 14 in which R^4 is hydrogen.

17. The compound of Claim 14 in which R^3 is a water-solublity increasing substituent selected from the group consisting of polyhydroxylated alkyl, monosaccharide, disaccharide and oligosaccharide

18. The compound of Claim 14 in which R^3 is hydrogen or lower alkyl.

19. The compound of Claim 14 in which R^5 is selected from the group consisting of glucosyl, galactosyl and mannosyl.

20. The compound of Claim 14 which is selected from the group consisting of Compounds **123**, **124**, **125** and **126**.

21. A pharmaceutical composition comprising a compound according to Claim 1 or Claim 14 and a pharmaceutically-acceptable carrier, excipient or diluent.

22. A method of inhibiting the growth of a fungus comprising contacting the fungus with an amount of a compound according to Claim 1 or Claim 14 effective to inhibit the growth of the fungus.

23. A method of treating or preventing a fungal infection in a subject comprising administering to a subject an amount of a compound according to Claim 1 or Claim 14 effective to treat or prevent the fungal infection.

24. The method of Claim 23 in which the subject is a human, an animal or a plant.

25. The method of Claim 23 in which the infection is a topical infection.

26. The method of Claim 23 in which the infection is a systemic infection.

27. A method of making a polyene macrolide amide derivative, comprising the steps of:

reacting a parent polyene macrolide with a reducing carbohydrate under Amadori rearrangement conditions to yield an Amadori rearrangement product; and

amidating the Amadori rearrangement product with an amine reagent of the formula HNR^6R^7, where R^6 and R^7 are as defined in Claim 1, to yield the polyene amide macrolide derivative.

28. The method of Claim 26 which further includes the step of N-alkylating the parent polyene macrolide, the Amadori rearrangement product or the resultant polyene macrolide amide derivative.

29. A method of making a polyene macrolide amide derivative, comprising the steps of:

amidating a parent polyene macrolide with an amine reagent of the formula HNR^6R^7, where R^6 and R^7 are as defined in Claim 1, to yield an amidated polyene macrolide; and

reacting the amidated polyene macrolide with a reducing carbohydrate under Amadori rearrangement conditions to yield the polyene macrolide amide derivative.

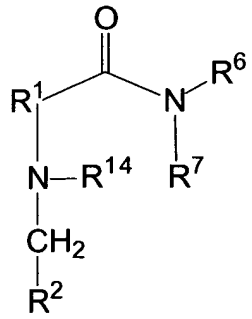
30. The method of Claim 28 which further includes the step of N-alkylating the parent polyene macrolide, the amidated polyene macrolide or the resultant polyene macrolide amide derivative.

31. The method of Claim 26 or 28 in which the amidation step is effected with an uronium salt or phosphonium salt coupling reagent.

32. The method of Claim 26 which is carried out in a single pot.

33. A method of making a polyene macrolide amide derivative according to structural formula (I):

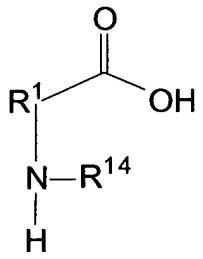
(I)



wherein N-R^1-C(O), CH_2-R^2, R^6, R^7 and R^{14} are as defined in Claim 1, comprising the steps of:

reacting a polyene macrolide according to structure (III):

(III)



with a reducing carbohydrate under Amadori rearrangement conditions to yield an Amadori rearrangement product; and

amidating the Amadori rearrangement product with an amine reagent of the formula HNR^6R^7 to yield the polyene macrolide amide derivative of formula (I).

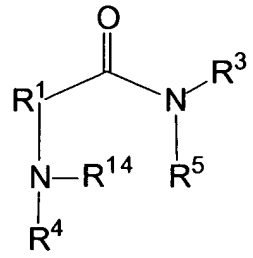
34. A method of making a polyenemacrolide amide derivative, comprising the steps of:

amidating a parent polyene macrolide with an amine reagent of the formula HNR^3R^5, where R^3 and R^5 are as defined in Claim 14, to yield the polyene macrolide amide derivative.

35. The method of Claim 33 which further includes the step of N-mono- or dialkylating the parent polyene macrolide or the resultant polyene macrolide amide derivative.

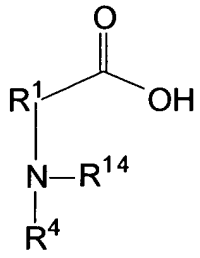
36. The method of Claim 33 in which the amidation step is effective with an uronium salt or phosphonium salt coupling reagent.

37. A method of making a polyene macrolide amide derivative according to structural formula (II):

(II) 

wherein N-R^1-C(O), R^3, R^4, R^5 and R^{14} are as defined in Claim 14, comprising the steps of:

reacting a polyene macrolide according to structure (IV):

(IV) 

with an amine reagent of the formula HNR^3R^5, where R^3 and R^5 are as defined in Claim 14, to yield the polyene macrolide amide derivative according to structural formula (II).

38. The method of Claim 36 in which the amidation step is effective with an uronium salt or phosphonium salt coupling reagent.

39. The polyene macrolide amide derivative produce by the method of any one of Claims 26, 28, 32, 33 or 36.